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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,202	03/26/2004	Robert B. Collier	01029.0010U1	2898
23506 7590 09/06/2007 GARDNER GROFF GREENWALD & VILLANUEVA. PC 2018 POWERS FERRY ROAD SUITE 800 ATLANTA, GA 30339			EXAMINER THOMAS, JAISON P	
			ART UNIT 1751	PAPER NUMBER
			MAIL DATE 09/06/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/811,202	Applicant(s) COLLIER ET AL.	
	Examiner Jaison P. Thomas	Art Unit 1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 39, 43, 48, 53, 58 and 62 is/are allowed.
- 6) ☒ Claim(s) 1-24, 26-38, 40-42, 44-47, 49-51, 53-57, 59-61 is/are rejected.
- 7) ☒ Claim(s) 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 6/26/2007 has been entered.

2. Claims 1-62 are pending. Claims 1,36,37,40,41 and 42 are amended.

3. The rejection of Claims 1-13,15-24,26-38,40-42,44-47,49-51,53-57, and 59-61 under Knowlton et al. (US Patent 5073442) in view of Derstadt et al. (US Patent 4116885) under 35 USC 103(a) are withdrawn in view of Applicant's amendments.

4. The rejection of Claim 14 under Knowlton et al. (US Patent 5073442) in view of Derstadt et al. (US Patent 4116885) and further in view of Carter et al. (US Patent Application Publication 2002/0142937A1) under 35 USC 103(a) are withdrawn in view of Applicant's amendments.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 1-7, 12-24, 26-38, 40-42, 44-47, 49-51, 53-57 and 59-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown (US Patent 5514302) in view of Dahanayake et al. (US Patent 6242404) and Carter et al. (US Patent Application Pub. 2002/0142937).

Brown teaches a fabric cleaning shampoo composition which contains 0.5 to 20 % of a fabric cleaning polymer, 0.1 to 10 % of a specific type of wax, 0.05 to 5% of silicone betaine polymer and an effective amount of surfactant (Abstract) including nonionic, anionic. Examples of anionic surfactants that are used include alkyl sulfonates (Col. 5, line 38) present in the composition from 0.5 to 20 % by weight of the composition. The wax can be synthetic, natural or wax-like organic substances and examples include maleinized and acrylated polyethylene waxes which Examiner construes as being equivalent to a wax-modified polymer as recited in Claim 1. The composition can also include solvents

Brown is relied upon as discussed above, however, Brown does not teach a polyester polymer wherein the polyester is not derived from a polyoxyalkylene glycol or zeolites.

Dahanayake et al. teaches enhanced soil release polymer compositions that contain a variety of soil release polymers. Dahanayake teaches the importance of soil-release polymers in cleaning compositions for different materials including carpets (Col. 1, lines 20-22). The polymers disclosed include sulfonated polyethylene terephthalate, polyester urethane, and acetic acid ethenyl esters (Col. 7, lines 64-67). Dahanayake further contains surfactants

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including anionic surfactants such as alpha olefin sulfonate salts (Col. 10, line 20). Dahanayake also teaches that the cleaning composition can further contain inorganic builders such as a silicate compound containing both silica and alkali metal oxide (Col. 11, lines 28-32).

Carter et al. teaches the use of nanozeolites for the elimination or suppression of odors on materials that are regularly exposed i.e. carpeting (pg. 1, para. 0002). A variety of these zeolites are disclosed including ZSM-5 (a known aluminosilicate), silicalite, mordenite and others (pg. 3, para. 0040).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cleaning compositions of Brown with those of Dahanayake and the zeolites of Carter since it is prima facie obvious to combine compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a composition to be used for the very same purpose, see *In re Kerkhoven*, 626 F.2d 846,850,205 USPQ 1069, 1072 (CCPA 1980). Alternatively, "The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." See *KSR v. Teleflex*, 127 S Ct. at 1739.

With respect to the product by process limitations of instant Claims 40-42, "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was

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made by a different process.” *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

With respect to the disodium alpha olefin sulfonate limitation of instant Claim 21, and the weight limitations of the polyester, wax-modified polymer, zeolites, surfactants, and metal oxides of instant Claims 6, 12, 15, 16, 22 and 26 it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the combined composition of Brown/Dahanayake/Carter through routine experimentation for best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the prima facie case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

With respect to the hydrazine and amine absence limitations of instant Claims 30, 31, 36, 37, 41, 45, 46, 50, 55, 56, and 60, the references are silent with respect to the presence of hydrazine or an amine particle.

7. Claims 1-24, 26-38, 40-42, 44-47, 49-51, 53-57 and 59-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knowlton et al. (US Patent 5073442) in view of Dahanayake et al. (US Patent 6242404) and Carter et al. (US Patent Application Pub. 2002/0142937).

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Knowlton teaches a composition for improving soil and stain resistance on fabrics using a "variety of combinations of sulfonated resin, sulfonated phenolic compounds, compounds of sulfonated phenolics and aldehydes, fluorochemicals, modified wax emulsions ..." (Abstract). The wax emulsions are further described as "[p]araffinic wax emulsion, microcrystalline wax emulsion, metalized wax emulsion such as aluminum salt/wax emulsion or zirconium salt/wax emulsion, modified fatty amide dispersions, anionic resinous wax emulsion such as melamine wax emulsion" (Column 2, lines 1-7). The types of phenolic resins disclosed include condensation products of formaldehyde with several different types of compounds disclosed in Column 1, lines 45-52. Examples of the composition include water as a solvent (Column 4, lines 40-48). Methods of application of the composition and the resulting carpet article are disclosed in Example 1 (Column 6, lines 15-23).

Knowlton is relied upon as discussed above, however, Knowlton does not teach a polyester polymer wherein the polyester is not derived from a polyoxyalkylene glycol or zeolites.

Dahanayake et al. teaches enhanced soil release polymer compositions that contain a variety of soil release polymers. Dahanayake teaches the importance of soil-release polymers in cleaning compositions for different materials including carpets (Col. 1, lines 20-22). The polymers disclosed include sulfonated polyethylene terephthalate, polyester urethane, and acetic acid ethenyl esters (Col. 7, lines 64-67). Dahanayake also teaches that the cleaning

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composition can further contain inorganic builders such as a silicate compound containing both silica and alkali metal oxide (Col. 11, lines 28-32).

Carter et al. teaches the use of nanozeolites for the elimination or suppression of odors on materials that are regularly exposed i.e. carpeting (pg. 1, para. 0002). A variety of these zeolites are disclosed including ZSM-5 (a known aluminosilicate), silicalite, mordenite and others (pg. 3, para. 0040).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cleaning compositions of Brown with those of Dahanayake and the zeolites of Carter since it is prima facie obvious to combine compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a composition to be used for the very same purpose, see *In re Kerkhoven*, 626 F.2d 846,850,205 USPQ 1069, 1072 (CCPA 1980). Alternatively, 'The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.'" See *KSR v. Teleflex*, 127 S Ct. at 1739.

With respect to the glass transition temperature limitations of the polyester of instant Claims 1, 4, 5, and 40 the covalent bonding limitation of instant Claim 7 the examiner respectfully submits that the prior art would reasonably meet the claimed limitation. Specifically, Knowlton and Dahanayake et al. teach similar materials used in similar situations to those required by the instant claims and therefore would reasonably possess the glass transition temperatures and covalent bonding characteristics required.

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With respect to the disodium alpha olefin sulfonate limitation of instant Claim 21, and the weight limitations of the polyester, wax-modified polymer, zeolites, surfactants, and metal oxides of instant Claims 6, 12, 15, 16, 22 and 26 it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the combined composition of Knowlton/Dahanayake/Carter through routine experimentation for best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the prima facie case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

With respect to the hydrazine and amine absence limitations of instant Claims 30, 31, 36, 37, 41, 45, 46, 50, 55, 56, and 60, the references are silent with respect to the presence of hydrazine or an amine particle.

Allowable Subject Matter

8. Claims 39, 43, 48, 52, 58, and 62 are allowable over the prior art made of record. The art does not teach nor reasonably suggest the use of activated carbon with the wax modified polymers and polyesters which are required by the instant claims.

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9. Claim 25 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The art does not teach nor reasonably suggest the use of a zinc oxide with the wax modified polymers and polyesters which are required by the instant claims.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaison P. Thomas whose telephone number is (571) 272-8917. The examiner can normally be reached on Mon-Fri 8:30 am to 5:00 pm.

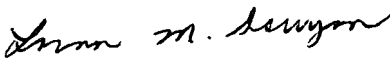
11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jaison Thomas
Examiner
8/31/2007

JT


LORNA M. DOUYON
PRIMARY EXAMINER